

A Review of June 2012

The warm year of 2012 continued into June. Below is an examination of temperatures from 9 locations across the area – Huron, Sioux Falls, Brookings, Pickstown, Yankton and Academy in South Dakota, Marshall and Pipestone in Minnesota and Sioux City, Iowa. For reference to records, here is a table showing how long each site has been recording temperatures and precipitation.

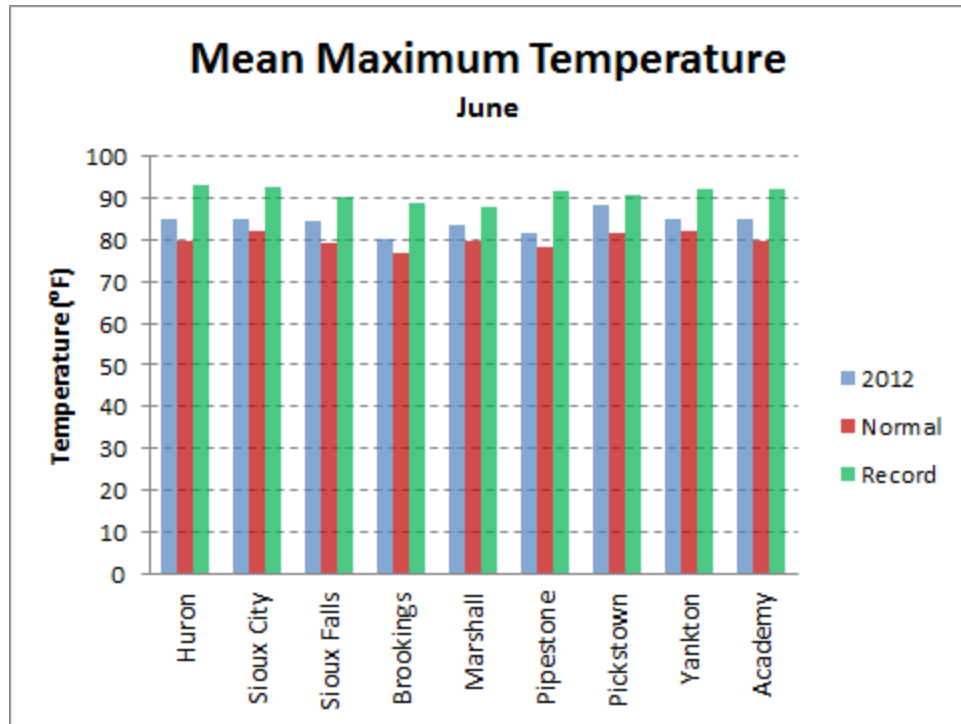
Location	Period of Record
Huron	1882-present
Sioux City	1890-present
Sioux Falls	1893-present
Brookings	1893-present
Marshall	1935-present
Pipestone	1905-1919,1921-present
Pickstown	1948-present
Yankton	1932-1983,1985-present
Academy	1899-present

Notice that Marshall, Pickstown and Yankton do not include data from all of the 1930s which is considered the warmest decade since records began in the late 19th century.

Maximum Temperature

Maximum temperatures at all of these locations averaged over 80 degrees in June. This was 3 to 6 degrees above the normal high for June. Despite being so warm, these temperatures were several degrees cooler than the record warmest years. Below is a graph and table showing the observed mean maximum temperature for 2012, the normal maximum temperature for June and the record mean maximum temperature for June as well as the year the record was set. Also, if 2012 was in among the Top 20 warmest years on record, its ranking is shown in the table.

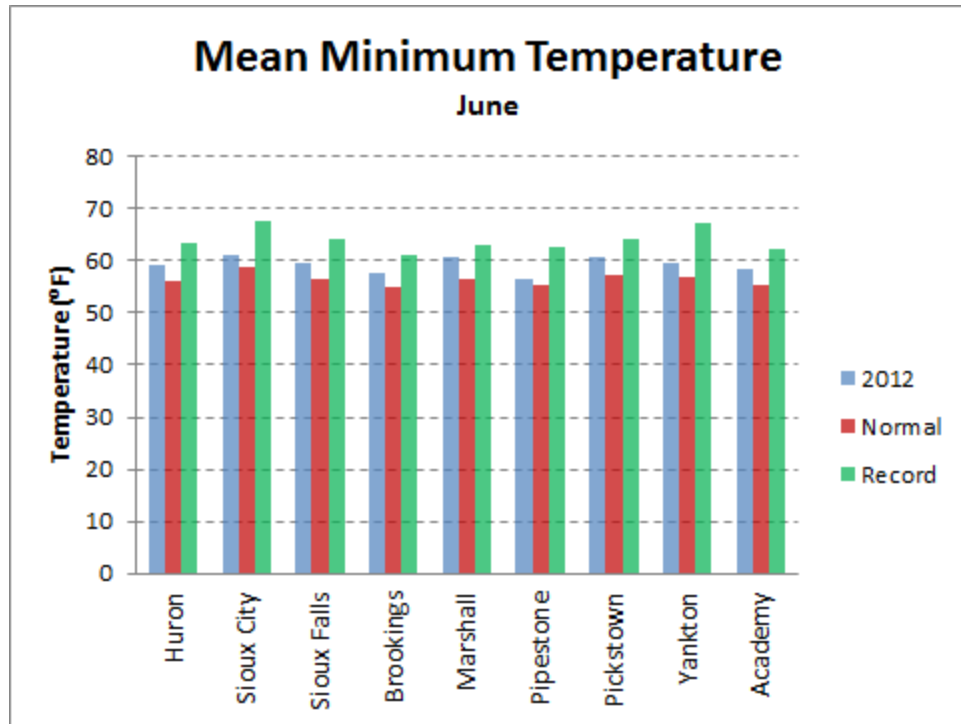
Location	2012	Normal	Departure from Normal	Rank	Record	Year of Record
Huron	85.2	79.6	5.6	Tied 11	93.3	1933
Sioux City	85.1	82.1	3.0	Tied 16	92.6	1933
Sioux Falls	84.7	79.2	5.5	11	90.3	1933
Brookings	80.2	76.6	3.6		88.7	1911
Marshall	83.5	79.7	3.8	6	87.8	1988
Pipestone	81.6	78.1	3.5		91.8	1933
Pickstown	88.3	81.4	6.9	4	90.6	1956
Yankton	85.2	82.3	2.9	8	92.3	1933
Academy	85.1	79.5	5.6		92.1	1956



Minimum Temperature

Like the maximum temperature, the average minimum temperature for June was also above normal – ranging from the middle 50s to lower 60s. While this was also above normal for June it was generally only 1 to 4 degrees above normal and also several degrees below the record warmest minimum temperatures at all locations.

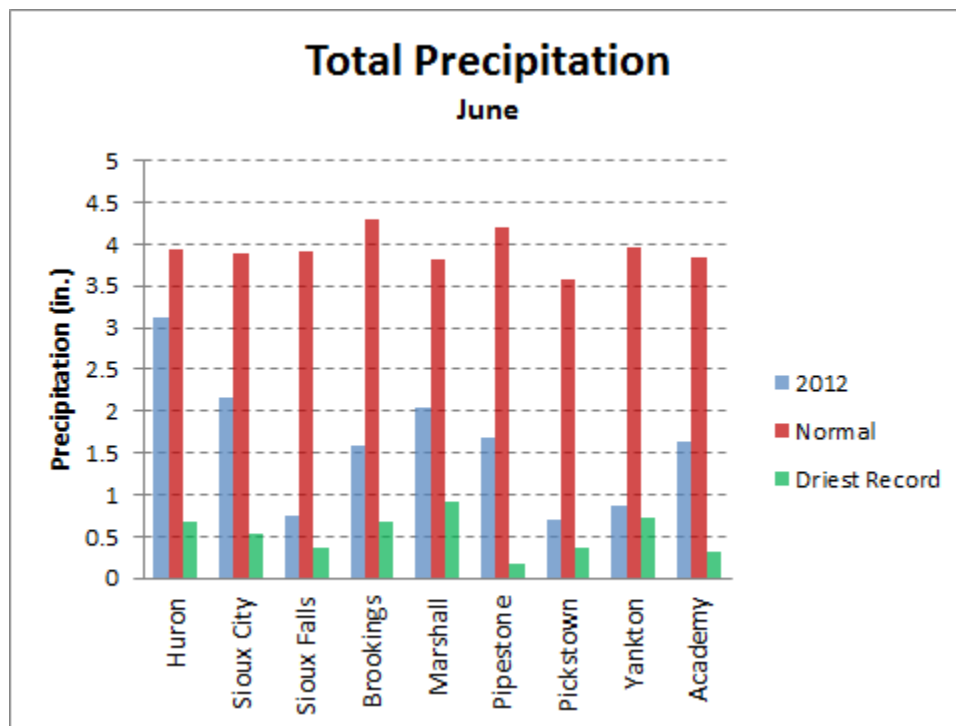
Location	2012	Normal	Departure from Normal	Rank	Record	Year of Record
Huron	59.2	55.9	3.3	13	63.4	1933, 1991
Sioux City	61.2	58.6	2.6		67.4	1933
Sioux Falls	59.5	56.4	3.1	Tied 16	64.3	1991
Brookings	57.7	54.8	2.9	14	61.2	1991
Marshall	60.6	56.6	4.0	8	63.0	1991
Pipestone	56.6	55.4	1.2		62.7	1933
Pickstown	60.6	57.5	3.2	11	64.3	1956
Yankton	59.4	56.8	2.6	17	67.2	1933
Academy	58.2	55.3	2.9	17	62.2	1931



Precipitation

Unlike May, which was above normal across the region, June was dry – especially between Interstate 90 and the Missouri River where less than an inch of rain fell during the month. In fact, Sioux Falls, Yankton, and Pickstown all had their second driest June on record. There was some heavier rainfall across the area with Huron, Marshall, and Sioux City all receiving over 2 inches of rain.

Location	2012	Normal	Departure from Normal	Rank	Driest Record	Year of Record
Huron	3.13	3.93	-0.80		0.67	1893, 1950
Sioux City	2.16	3.89	-1.73		0.53	1988
Sioux Falls	0.74	3.92	-3.18	2	0.36	1893
Brookings	1.59	4.30	-2.71	12	0.67	1933
Marshall	2.04	3.82	-1.78	11	0.91	1973
Pipestone	1.69	4.21	-2.52	T18	0.17	1918
Pickstown	0.70	3.57	-2.87	2	0.37	1995
Yankton	0.80	3.97	-3.10	2	0.72	1956
Academy	1.64	3.85	-2.21	16	0.32	1912



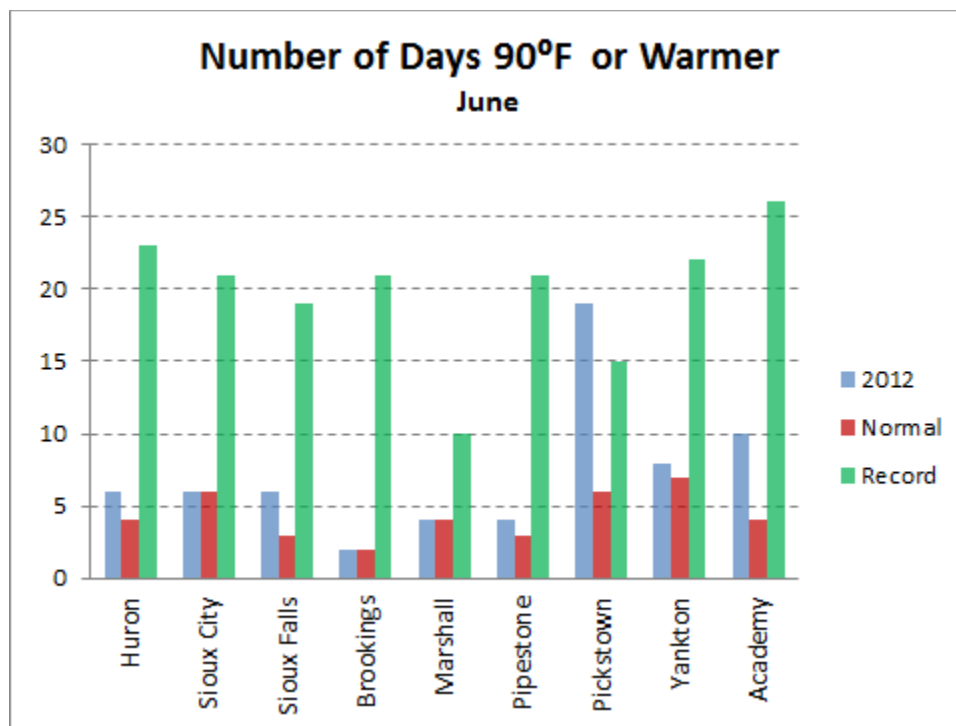
Days with extreme temperatures

One can also count the number of days with extreme temperatures as another way to judge how warm and uncomfortable the weather is. One measure is to examine how many days were at or above 90°F which can result in warm (and humid) days to be outside. Another measure is to examine how many days had minimum temperature at or above 70°F. Very warm nights can make it much more difficult to cool off residences during the evening and overnight.

While June had more 90°F days and days with lows at or above 70°F than normal, neither was near the record value with the exception of Pickstown, SD which had 19 days at or above 90 and broke the record of 15 set in 1952 and 1956. As for lows above 70°F, most places were around the normal of 1 to 2 times during the month.

Number of days at or above 90 Degrees

Location	2012	Normal	Departure from Normal	Record	Year of Record
Huron	6	4	2	23	1933
Sioux City	6	6	0	21	1933
Sioux Falls	6	3	3	19	1933
Brookings	2	2	0	21	1933
Marshall	4	4	0	10	1959, 1987, 1988
Pipestone	4	3	1	21	1933
Pickstown	19	6	13	15	1952, 1956
Yankton	8	7	1	22	1933
Academy	10	4	6	26	1933



Number of days minimum temperature at or above 70 Degrees

Location	2012	Normal	Departure from Normal	Record	Year of Record
Huron	2	1	1	6	1933
Sioux City	4	2	2	12	1933
Sioux Falls	3	1	2	8	1931
Brookings	1	1	0	7	1931
Marshall	2	1	1	6	1956
Pipestone	1	1	0	5	1931
Pickstown	2	1	1	10	1956
Yankton	3	2	1	11	1933
Academy	2	1	1	12	1933

